



Lode Runner™

*An Action Game and Game Generator
by Doug Smith
Commodore 64 Cartridge Version
by Dane Bigham*



Broderbund Software™

PLAYING THE GAME



You are a Galactic Commando deep in enemy territory. Power hungry leaders of the repressive Bungeling Empire have stolen a fortune in gold from the people by means of excessive fast food taxes. Your task? To infiltrate each of 17 different treasury rooms, evade the deadly Bungeling guards, and recover every chest of Bungeling booty.

TO START:

Insert the cartridge label side up, with the computer off. Turn on your computer. The game will begin in a self-playing demo of three different levels of play. Watch them to get a sense of the game. To begin play, press any key (except "Return") or push the joystick button. Your player will start to flash. Move your player or push the joystick button to begin game action.

IMPORTANT: When using joystick control, be sure your joystick is plugged into Control Port 2 (not 1).

KEYBOARD COMMANDS:

I = move up
K = move down
J = move left
L = move right
U = dig left
O = dig right

JOYSTICK COMMANDS:

Up/Down/Left/Right
Button = Dig

GAME PLAY:

To complete a level, you must collect all the gold chests in a scene. When you succeed, you may then climb to the top of the screen and enter the next level. You will also gain bonus points and earn an extra life for each level you complete. You start with 5 lives.

You will use your laser drill pistol to drill pits and passageways through brick floors. You may dig through fissured bricks only, not through solid surfaces, and holes must be drilled all the way through to be effective. If a Bungeling guard falls into a pit and gets stuck, it will become safe (for a moment) for you to run over him; also, he will release any gold he is carrying. Any holes that you've drilled will fill in again after a period of time, and guards caught in them when they refill will die and be replenished by new guards at the top of

the screen. Be careful: Guards can climb out of pits that do not close up around them. Your player, however, cannot climb out of pits and will die if trapped in a pit that is only a single brick wide.

You will notice that gold chests carried by enemy guards cease to be visible. If you have picked up all the visible gold on the screen and the ladder leading to the next level has not yet appeared or you cannot reach the next level by climbing to the highest part of the screen, one or more of the guards is still carrying gold. You must trap the guards in a pit and pick up their gold. If an enemy carrying gold falls into a "dead end" that he and you are unable to leave, you will not be able to get that gold chest safely. If stuck in a "dead end," press CTRL-A to continue (see below).

SCORING:

Completing a level.....	1500 points
Picking up a gold chest.....	250
Trapping an enemy.....	75
Enemy dying in a hole.....	75

SPECIAL KEYS:

CTRL-A	aborts man if stuck without means of death or escape
CTRL-J	sets game to joystick control
CTRL-K	sets game to keyboard control
CTRL-R	terminates current game (enter demo mode)
-	slows down overall game speed (press repeatedly)
+	speeds up overall game speed (press repeatedly)
RUN/STOP	freezes action until RUN/STOP hit again
CTRL-D	toggles direction of dig (forward or behind runner)

MAKING YOUR OWN GAMES



The Game Generator ("Edit mode") lets you design, move, erase,

playtest, and save to disk or tape your own unique Lode Runner games—with no programming knowledge required! You may also use this editor to access directly (then play) any of Lode Runner's 17 different game screens.

The following chart summarizes the steps involved in making and saving your own games. Detailed instructions are given in the sections that follow.

Be sure to try out each step as you go through this tutorial. Creating and saving your own game boards will soon become second nature!

HOW TO MAKE YOUR OWN GAMES: SUMMARY

	WHAT TO DO	HOW TO DO IT
1.	Enter "Edit Mode"	Press CTRL-E from demo mode (or CTRL-R then CTRL-E from game in progress)
2.	Prepare Cartridge Memory	Press I to "clear" cartridge game boards ("Initialize")
3.	Prepare Storage Device	Put disk in drive (see "Initializing Your Data Disk") — or — Put tape in tape player (See "Using Cassette Tapes")
4.	Design Your Game	Press E (for Edit); Use I-J-K-M keys to move cursor; Use 0-9 to make shapes
5.	Save Your Game To Cartridge Memory	Press CTRL-S
6.	Play Your Game	Press CTRL-Q to "Quit" game generator; Press P (and RETURN) to "Play"
7.	Save Game "Set" To Disk or Tape	Press S to permanently save a set of new games to disk or tape

1. ENTERING EDIT MODE:

First you must enter Edit mode. If you are playing a game, press CTRL-R to end the game, then press CTRL-E (for "Edit"). If you are starting from the self-playing demo mode, simply press CTRL-E. The Lode Runner Board Editor screen will appear, allowing you to enter the following single-key editing commands:

- E (for "EDIT a Game Board")
- P (for "PLAY Any Level")
- I (for "INITIALIZE Cartridge Memory")
- R (for "RESTORE Cartridge Memory")
- C (for "CLEAR a Game Board")
- M (for "MOVE a Game Board")
- X (for "EXCHANGE Two Game Boards")
- S (for "SAVE a Set of User-Created Boards")
- L (for "LOAD a Set of User-Created Boards")

These commands are explained in the instructions below.

2. PREPARING CARTRIDGE MEMORY

Next you must clear an area of memory in the cartridge to make room for the new games you create. To do this, simply press I (for "INITIALIZE Cartridge Memory"). (Don't worry, this does not permanently erase the 17 existing levels; it just sets them safely aside. You may restore them to active memory anytime simply by pressing R for "Restore". If you do this, however, be sure to save your newly created levels to tape or disk first. Otherwise your new levels will be erased.)

3. PREPARING YOUR STORAGE DEVICE:

You may use a disk drive or a Commodore datasette player to save any game boards you create.

A) INITIALIZING YOUR DATA DISK:

If you are using a disk drive, before designing your first game board or set of game boards, you must prepare a Lode Runner data disk on which to save your creations.

With your computer turned off, remove the Lode Runner cartridge and follow Commodore's instructions for initializing a blank

data disk. (See your disk drive manual for details on how to format or initialize a disk.) In brief, you may do this by putting a blank disk in your disk drive and then typing **OPEN 15,8,15**. Press RETURN. Then type **PRINT#15, "NO:LODE, 00"** and again press RETURN. The formatting process takes a minute or two. When the disk drive busy light goes off, your data disk is ready to use.

Once you have initialized a data disk, put it into the disk drive whenever you want to save or load a user-designed set of Lode Runner game boards. Note: You may save up to 10 different "sets" of 17 game boards on a single data disk!

B) USING A CASSETTE TAPE:

If you are using tape, rewind the tape to the beginning, then advance the tape so that the "leader" is fully taken up. If you try to save to or load information on the leader (rather than the magnetic tape itself) you will encounter load/save errors. No further tape preparation is needed.

4. DESIGNING YOUR OWN GAME BOARDS:

Now that you have "initialized" the cartridge memory and have a storage medium ready (disk or tape), you can begin creating your own games! From the Lode Runner Board Editor screen, press E (for "Edit"). You will be asked to type in the number of the game board you want to work on (01-17). For your first board, use 01. Type in the number, then press RETURN. The selected screen will appear.

NOTE: Whenever you type in board numbers in response to prompts in the Board Editor, you must type the entire two digit number before pressing RETURN (i.e. 3 must be entered as 03, 9 as 09, etc.) You may use the DEL and right cursor keys to skip over digits or to make corrections before pressing RETURN.

The process of designing your own boards is simple. There are nine basic shapes that make up all Lode Runner game boards. Each of these shapes is controlled by one of nine number keys (1-9). Zero (0) makes a blank. To design a game screen, you simply move the cursor around the screen with the cursor movement keys and place the shapes where you want them by pressing the appropriate number keys.

Remember: You **MUST** have a tape or an initialized data disk on hand if you are going to save your creations permanently; you cannot use

the Lode Runner cartridge for this purpose.

IMPORTANT: SEE TIPS ON SAVING YOUR CREATIONS BELOW. YOU MUST SAVE YOUR GAME TO CARTRIDGE MEMORY (CTRL-S) EACH TIME YOU QUIT THE GAME GENERATOR, EVEN TO PLAYTEST.

CURSOR MOVEMENT CONTROLS:

- I** = up a line
- M** = down a line
- J** = left a character
- K** = right a character

LODE RUNNER SHAPES:

 = blank	 = trap door
 = diggable floor	 = ladder that appears after getting all gold
 = undiggable floor	 = gold chest
 = ladder	 = enemy
 = hand over hand bar	 = player

There are a few practical limitations regarding the number of objects you can use:

YOU MUST HAVE ONE "PLAYER" ON YOUR GAME BOARD FOR YOUR GAME TO BE PLAYABLE—i.e. NO MORE, NO LESS THAN ONE LODE RUNNER COMMANDO (SHAPE #9) MUST BE INCLUDED IN YOUR GAME BOARD DESIGN. OTHERWISE, WHEN YOU TRY PLAYING YOUR GAME, YOU WILL BE RETURNED TO DEMO MODE.

You may have 1, 2, 3, 4 or 5 enemy guards (shape #8) on a board. No more than five, no less than one.

The other shapes (1-7) also have numerical limits, though you are not likely to exceed them. If you do, the program will simply ignore the excess.

From within the game generator, you may also view adjacent Lode Runner boards by pressing CTRL-F (for forward) or CTRL-B (for back).

5. SAVING YOUR CREATIONS:

When you finish designing a screen or when you want to play test it or take a break . . .

YOU MUST SAVE THE BOARD TO CARTRIDGE MEMORY BY TYPING CTRL-S (for "Save"). IF YOU DO NOT SAVE THE GAME, THE BOARD WILL BE LOST WHEN YOU EXIT THE GAME GENERATOR!

TO SAVE THE BOARD OR SET OF BOARDS PERMANENTLY (i.e., after you turn off the power switch), YOU MUST ALSO SAVE TO DISK OR TAPE (see 7 below).

6. PLAYING YOUR GAME:

After you have saved a board (using CTRL-S), type CTRL-Q (for "Quit"). CTRL-Q returns you to the Board Editor screen. From there simply type P (for "Play") and RETURN to play the game board you've created.

Note that there are two "cheat keys" available for playing your own games (Sorry, you can't use these with the original cartridge levels!):

CTRL-U (for "UP"; advances a level

CTRL-F (for "FREE MAN"; adds additional lives.

7. SAVING TO DISK OR TAPE:

While 17 new, user-designed levels may be playable in the cartridge's memory at one time, they will be erased when you turn off your computer unless you first save them "permanently" to disk or tape. (Don't worry, you can always reload them into memory and revise them later!)

To save to disk or tape, press S from the Edit Mode command screen. You will then be asked Disk or Tape? Answer appropriately: D or T.

If you are using a disk you will be asked to enter a "Set" number (0-9). This is because game boards are always saved in sets of 17 (even if all 17 boards in a set are not yet created). This method of saving in "sets" of 17 rather than by individual board, means you can work on a number of boards (up to 17 at a time) without having to save to tape or disk for each one. In other words, you can work on a whole (or partial) set of 17 Lode Runner levels and then save all of the levels to tape or disk at once in a single procedure. (Of course, you need to have been saving to the cartridge's memory all along! See 5 above.)

Incidentally, you may save up to 10 completely different "sets" of 17 different game boards on each initialized data disk!

If you are using cassette tape, you will also be saving in "sets" of 17 boards at a time, though the sets are not numbered.

OTHER EDIT MODE COMMANDS:

The other single-key commands available from the Board Editor (CTRL-E screen) are as follows:

P (Play) — Lets you select any game board you desire. After pressing P, you will be asked to enter the two digit number of the level you wish to play (01-17). Type in the number and press RETURN. Note: If you attempt to enter Play mode using a set of game boards that has no level 01, control is returned to demo mode. To resolve this, enter Edit mode and create a first level.

C (Clear) — Erases a game board from the cartridge memory (blanks the board).

M (Move) — Copies a board to another level number.

X (Exchange) — Swaps one board for another.

L (Load) — Loads into memory (from disk or tape) a set of 17 user-created game boards that had previously been saved.

R (Restore) — Restores to cartridge memory the cartridge's original set of 17 levels. Restore cancels out the I ("Initialize Cartridge Memory") command.

Note: You cannot Clear, Move, Exchange or Edit the 17 original game boards on the cartridge. These functions are available for use with

your own boards only.

TROUBLESHOOTING:

Whenever there is a disk error when loading or saving, the game will return to editor mode. If this happens, check to see if an initialized data disk is in the disk drive and if the drive door is shut. If this doesn't resolve the problem, check to see if you have a level 01 on your game disk. If not, create one.

If the screen clears and turns blue during a tape load or save, there is a tape error. Press RUN/STOP to stop the tape player and rewind the tape, making sure you are not trying to record over non-magnetic leader instead of tape.

Playtest your own board creations to make sure they are beatable. If you want to refine or improve them, simply return to the editor.

Remember, as mentioned in "Game Play," if a player becomes stuck in a "dead end" with no way out, press CTRL-A to Sacrifice that "life" and to resume play

BRØDERBUND SOFTWARE, INC./ENTERTAINMENT SOFTWARE DIVISION
17 Paul Drive, San Rafael, California 94903

© 1983 by Brøderbund Software, Inc. Commodore 64 is a registered trademark of Commodore Electronics Ltd.